

=>
Uploading C:\Program Files\Stnexp\Queries\09676487.str

L1 STRUCTURE UPLOADED

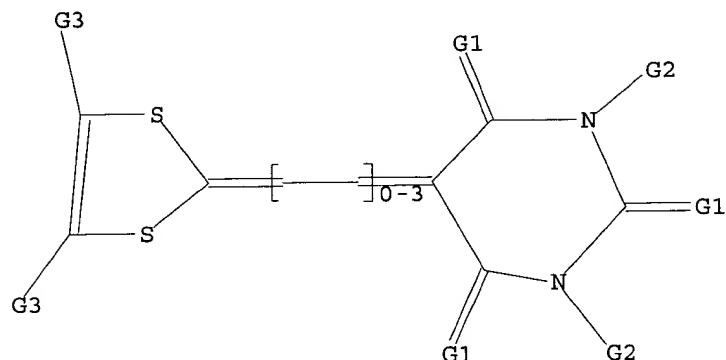
=> que L1

L2 QUE L1

=> d

L2 HAS NO ANSWERS

L1 STR



G1 O,S

G2 H,Cb,Hy,Ak,Ph

G3 H,Ak

Structure attributes must be viewed using STN Express query preparation.
L2 QUE ABB=ON PLU=ON L1

=> s l2

SAMPLE SEARCH INITIATED 13:05:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS
SEARCH TIME: 00.00.02

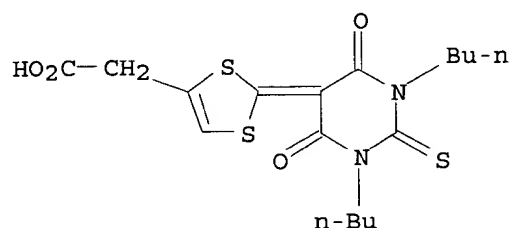
2 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 5 TO 234
PROJECTED ANSWERS: 2 TO 124

L3 2 SEA SSS SAM L1

=> d

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS
RN 231299-35-7 REGISTRY
CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H22 N2 O4 S3
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1962 TO DATE)
2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL USPATFULL CAPLUS HCAPLUS
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
2.34	2.55

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 13:06:02 ON 04 DEC 2002
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FILE 'HCAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002
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=> d his

(FILE 'HOME' ENTERED AT 13:04:46 ON 04 DEC 2002)

FILE 'REGISTRY' ENTERED AT 13:05:01 ON 04 DEC 2002

L1 STRUCTURE UPLOADED
L2 QUE L1
L3 2 S L2

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002

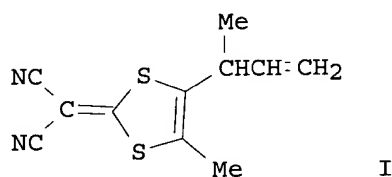
=> s 13

L4 6 L3

=> d l4 1-6 ibib abs hitstr

L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2001:469363 CAPLUS
DOCUMENT NUMBER: 135:84325
TITLE: Manufacture of lithographic plate by twice finishing treatment
INVENTOR(S): Shiraishi, Yuichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

ACCESSION NUMBER: 1995:711929 HCAPLUS
 DOCUMENT NUMBER: 123:339823
 TITLE: A new access to 1,3-dithiol-2-ylidenes from
 S-propargyl dithiocarbonates (xanthates)
 AUTHOR(S): Boivin, Jean; Henriot, Eric B.; Zard, Samir Z.
 CORPORATE SOURCE: Lab. Synthèse Org. Associe, CNRS, Ecole Polytech.,
 Palaiseau, F-91128, Fr.
 SOURCE: Tetrahedron Letters (1995), 36(29), 5171-4
 CODEN: TELEAY; ISSN: 0040-4039
 PUBLISHER: Elsevier
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 123:339823
 GI



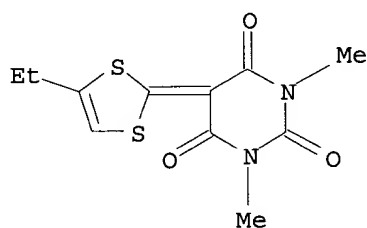
AB Heating propargylic xanthates, e.g. $\text{CH}_2\text{:CHCHMeC.tplbond.CCH}_2\text{SC(C)OMe}$, in toluene or chlorobenzene in the presence of an active methylene compd., e.g., malononitrile, produces a 1,3-dithiol-2-ylidene, e.g. I, through a series of steps involving a betaine.

IT 170301-81-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of 1,3-dithiol-2-ylidenes from S-propargyl dithiocarbonates)

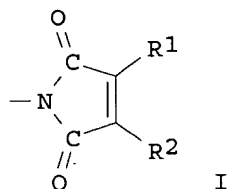
RN 170301-81-2 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(4-ethyl-1,3-dithiol-2-ylidene)-1,3-dimethyl- (9CI) (CA INDEX NAME)



PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001174979	A2	20010629	JP 1999-354446	19991214

GI



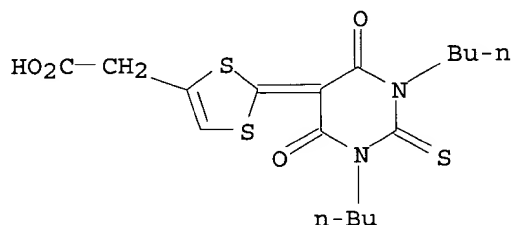
AB The lithog. plate, comprising a hydrophilized Al support coated with a photosensitive layer contg. a sensitizer and an alkali-sol. or swelling polymer having .gtoreq.2 of maleimide groups I (R1-2 = H, halo, alkyl, R1 and R2 may form a 5- or 6-membered ring) at the side chain, is exposed, developed, and finishing treated .gtoreq.2 times using the same or the different finishing solns. The lithog. plate shows high sensitivity, ink receiving property, and printing durability.

IT 231299-35-7

RL: DEV (Device component use); USES (Uses)
(sensitizer; manuf. of lithog. plate contg. polymer with maleimide side chain by twice finishing treatment)

RN 231299-35-7 CAPLUS

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)



not monovalent

L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:412775 CAPLUS

DOCUMENT NUMBER: 131:108959

TITLE: Photosensitive composition containing photocrosslinkable polymer and manufacture of lithographic plate using it

INVENTOR(S): Shiraishi, Yuichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174674	A2	19990702	JP 1997-340219	19971210

OTHER SOURCE(S): MARPAT 131:108959

AB The compn. contains a photocrosslinkable polymer with a maleimide group

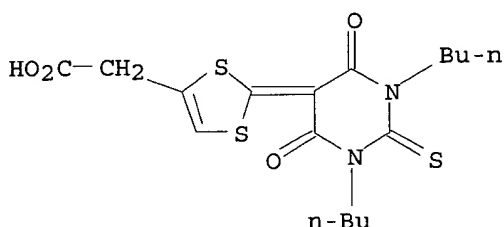
and an acid group with dissocn. to an alk. aq. soln. in its side chain, a sensitizer, and .gtoreq.1 of alk. compds. XOH, X2CO3, XHCO3, NR3R4R5, Y(OH)2, and YCO3 [X = alkali metal, NR6R7R8R9; Y = alkali earth metal; R3-9 = H, (substituted) alkyl]. The acid group may be replaced by a group forming a salt from alkali metal salt, alkali earth metal salt, or ammonium salt NR6R7R8R9 [R6-9 = H, (substituted) alkyl]. The lithog. plate is manufd. by removing a photosensitive layer in unexposed areas with water or aq. soln. with pH of 3-11, after imagewise exposing the photosensitive layer contg. the obtained compn. The compn. enables to develop the printing plate with neutral water or aq. soln. instead of strong alk. aq. soln.

IT 231299-35-7P

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(sensitizer; presensitized lithog. plate contg. photocrosslinkable polymer, sensitizer, and alk. compd.)

RN 231299-35-7 CAPLUS

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:711929 CAPLUS

DOCUMENT NUMBER: 123:339823

TITLE: A new access to 1,3-dithiol-2-ylidenes from S-propargyl dithiocarbonates (xanthates)

AUTHOR(S): Boivin, Jean; Henriet, Eric B.; Zard, Samir Z.

CORPORATE SOURCE: Lab. Synthèse Org. Associée, CNRS, Ecole Polytech., Palaiseau, F-91128, Fr.

SOURCE: Tetrahedron Letters (1995), 36(29), 5171-4

CODEN: TELEAY; ISSN: 0040-4039

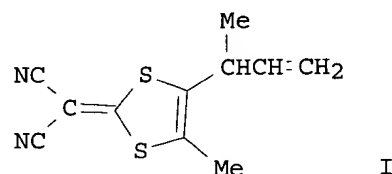
PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:339823

GI



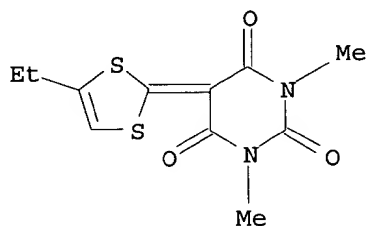
I

AB Heating propargylic xanthates, e.g. CH2:CHCHMeC.tplbond.CCH2SC(C)OMe, in toluene or chlorobenzene in the presence of an active methylene compd., e.g., malononitrile, produces a 1,3-dithiol-2-ylidene, e.g. I, through a series of steps involving a betaine.

IT 170301-81-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

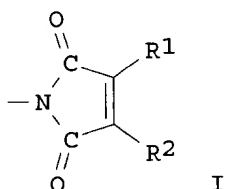
(prepn. of 1,3-dithiol-2-ylidenes from S-propargyl dithiocarbonates)
 RN 170301-81-2 CAPLUS
 CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-(4-ethyl-1,3-dithiol-2-ylidene)-1,3-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:469363 HCAPLUS
 DOCUMENT NUMBER: 135:84325
 TITLE: Manufacture of lithographic plate by twice finishing treatment
 INVENTOR(S): Shiraishi, Yuichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001174979	A2	20010629	JP 1999-354446	19991214

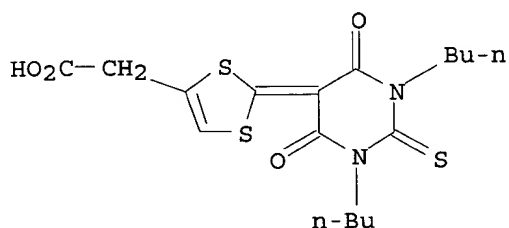
GI



AB The lithog. plate, comprising a hydrophilized Al support coated with a photosensitive layer contg. a sensitizer and an alkali-sol. or swelling polymer having .gtoreq.2 of maleimide groups I (R1-2 = H, halo, alkyl, R1 and R2 may form a 5- or 6-membered ring) at the side chain, is exposed, developed, and finishing treated .gtoreq.2 times using the same or the different finishing solns. The lithog. plate shows high sensitivity, ink receiving property, and printing durability.

IT 231299-35-7
 RL: DEV (Device component use); USES (Uses)
 (sensitizer; manuf. of lithog. plate contg. polymer with maleimide side chain by twice finishing treatment)

RN 231299-35-7 HCAPLUS
 CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:412775 HCAPLUS
 DOCUMENT NUMBER: 131:108959
 TITLE: Photosensitive composition containing photocrosslinkable polymer and manufacture of lithographic plate using it
 INVENTOR(S): Shiraishi, Yuichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174674	A2	19990702	JP 1997-340219	19971210

OTHER SOURCE(S): MARPAT 131:108959

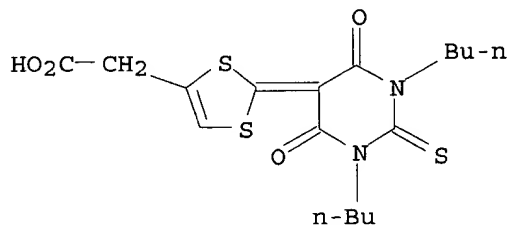
AB The compn. contains a photocrosslinkable polymer with a maleimide group and an acid group with dissocn. to an alk. aq. soln. in its side chain, a sensitizer, and .gtoreq.1 of alk. compds. XOH, X₂CO₃, XHCO₃, NR₃R₄R₅, Y(OH)₂, and YCO₃ [X = alkali metal, NR₆R₇R₈R₉; Y = alkali earth metal; R₃-9 = H, (substituted) alkyl]. The acid group may be replaced by a group forming a salt from alkali metal salt, alkali earth metal salt, or ammonium salt NR₆R₇R₈R₉ [R₆-9 = H, (substituted) alkyl]. The lithog. plate is manufd. by removing a photosensitive layer in unexposed areas with water or aq. soln. with pH of 3-11, after imagewise exposing the photosensitive layer contg. the obtained compn. The compn. enables to develop the printing plate with neutral water or aq. soln. instead of strong alk. aq. soln.

IT 231299-35-7P

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
 (sensitizer; presensitized lithog. plate contg. photocrosslinkable polymer, sensitizer, and alk. compd.)

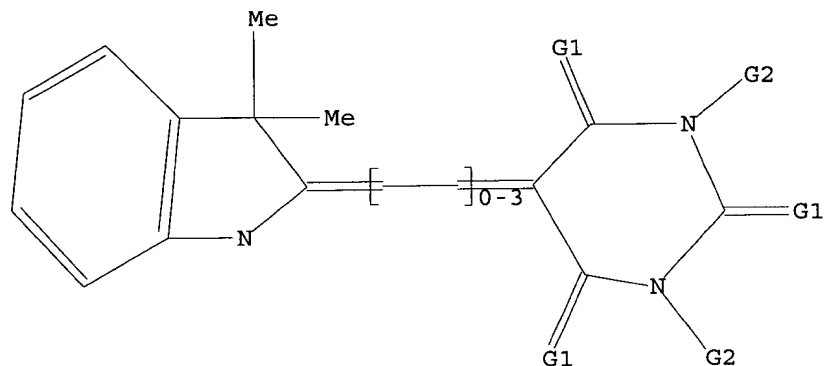
RN 231299-35-7 HCAPLUS

CN 1,3-Dithiole-4-acetic acid, 2-(1,3-dibutyltetrahydro-4,6-dioxo-2-thioxo-5(2H)-pyrimidinylidene)- (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS

=> d
 L8 HAS NO ANSWERS
 L5 SCR 963
 L6 SCR 1821 OR 1822 OR 1823 OR 1824
 L7 STR



G1 O, S
 G2 H, Cb, Hy, Ak, Ph
 G3 H, Ak

Structure attributes must be viewed using STN Express query preparation.
 L8 QUE ABB=ON PLU=ON L7 AND L5 AND L6

=> s 18
 SAMPLE SEARCH INITIATED 13:11:11 FILE 'REGISTRY'
 SAMPLE SCREEN SEARCH COMPLETED - 11 TO ITERATE

100.0% PROCESSED 11 ITERATIONS
 SEARCH TIME: 00.00.01

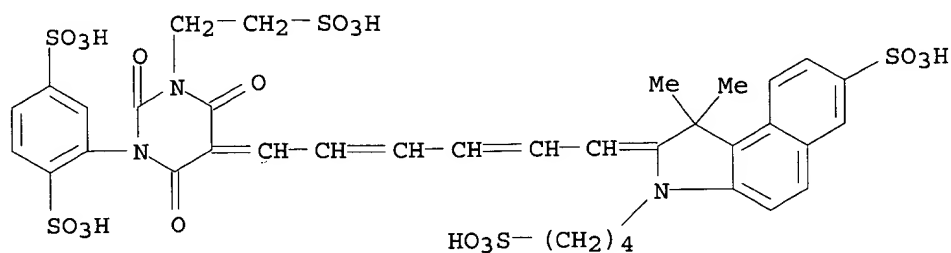
3 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
 BATCH **COMPLETE**
 PROJECTED ITERATIONS: 22 TO 418
 PROJECTED ANSWERS: 3 TO 163

L9 3 SEA SSS SAM L7 AND L5 AND L6

=> d

L9 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS
 RN 183272-29-9 REGISTRY
 CN 1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)
 MF C36 H37 N3 O18 S5 . 5 K
 SR CA
 LC STN Files: CA, CAPLUS



● 5 K

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

=> FIL USPATFULL CAPLUS HCAPLUS
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
2.34	35.64

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
0.00	-3.72

CA SUBSCRIBER PRICE

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=> s l9

L10 6 L9

=> d his

(FILE 'HOME' ENTERED AT 13:04:46 ON 04 DEC 2002)

FILE 'REGISTRY' ENTERED AT 13:05:01 ON 04 DEC 2002

L1 STRUCTURE UPLOADED

L2 QUE L1

L3 2 S L2

FILE 'USPATFULL, CAPLUS, HCAPLUS' ENTERED AT 13:06:02 ON 04 DEC 2002

L4 6 S L3

FILE 'HOME' ENTERED AT 13:07:59 ON 04 DEC 2002

FILE 'REGISTRY' ENTERED AT 13:10:01 ON 04 DEC 2002

L5 SCREEN 963

L6 SCREEN 1821 OR 1822 OR 1823 OR 1824

L7 STRUCTURE UPLOADED

L8 QUE L7 AND L5 AND L6

L9 3 S L8

L10

6 S L9

=> s l10 not l4

L11 6 L10 NOT L4

=> d l11 1-6 ibib abs hitstr

L11 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:693723 CAPLUS

DOCUMENT NUMBER: 125:312364

TITLE: Silver halide photographic materials containing hexamethinemeroctacyanine compounds

INVENTOR(S): Sakurada, Masami; Oono, Shigeru

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

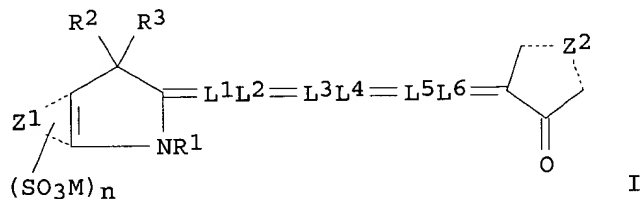
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08211552	A2	19960820	JP 1995-15010	19950201

GI



AB The title materials comprise a hydrophilic colloid layer contg. .gtoreq.1 hexamethinemeroctacyanine compd. I [Z1 = nonmetal atoms required to form a benzo-condensed or naphtho-condensed ring; M = H, atoms or metal atom forming a monovalent cation; n = 1-3; R1-3 = (substituted) alkyl; L1-6 (substituted) methine group, the adjacent substituents may condensed to form a 5- or 6-membered ring; Z2 = atoms required to form a (substituted) heterocycle selected from pyrazolidinedion, isooxazolone, pyrazolopyridone, barbituric acid, pyridone, rhodanine]. The compds. are stable and water-sol. and provide photog. materials showing improved decoloring properties without adverse effects on the photog. properties.

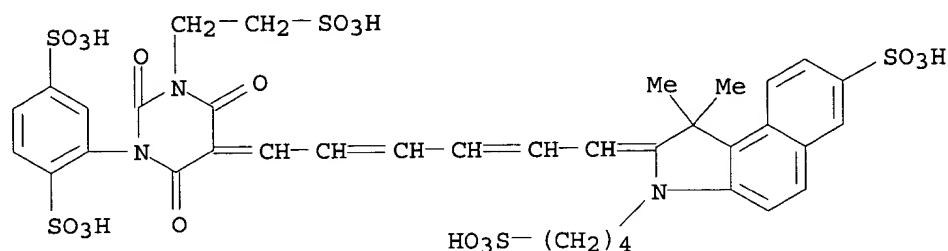
IT 183272-29-9

RL: DEV (Device component use); USES (Uses)

(Ag halide photog. materials contg. hexamethinemeroctacyanine compds.)

RN 183272-29-9 CAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfobutyl)-2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)



● 5 K

L11 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:640204 CAPLUS

DOCUMENT NUMBER: 125:278576

TITLE: Molecular hyperpolarizabilities of barbituric acid and cyclobutene-1,2-dione derivatives. Electronic and steric effects

AUTHOR(S): Cho, Bong Rae; Je, Jong Tae; Lee, Seung Jae; Lee, Sang Hae; Kim, Hyun Soo; Jeon, Seung Joon; Song, Ok-Keum; Wang, C. H.

CORPORATE SOURCE: Department of Chemistry, Korea University, Seoul, 136-701, S. Korea

SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1996), (10), 2141-2144
CODEN: JCPKBH; ISSN: 0300-9580

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

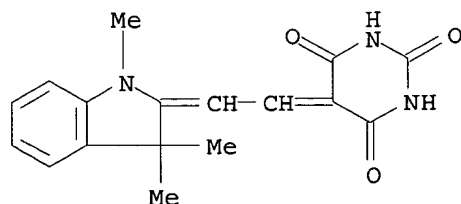
AB A series of merocyanine dyes contg. various donors and barbituric acid and cyclobutene-1,2-dione moieties as the acceptors have been synthesized and their first-order hyperpolarizabilities .beta. were detd. The .beta. values of the barbituric acid derivs. increase as the strength of the donor is increased from 4-(dimethylamino)phenyl to trimethylindolyl to benzothiazolyl, apparently due to the gradual decrease in the bond length alteration from a large pos. value to an optimum one by a stronger donor. In contrast, the .beta. values for the cyclobutene-1,2-dione derivs. decrease with the same variation of the donors even though the cyclobutene-1,2-dione is a poorer acceptor than the barbituric acid moiety. The results have been attributed to the electron-donating ability of the donors and the increased distortion of the chromophores from planarity.

IT 93818-94-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(hyperpolarizabilities of merocyanines from barbituric acid and cyclobutenediones)

RN 93818-94-1 CAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)



Not merocyanine

L11 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1963:426202 CAPLUS
DOCUMENT NUMBER: 59:26202
ORIGINAL REFERENCE NO.: 59:4716e-g
TITLE: Stereochemical factors affecting optical sensitization
AUTHOR(S): Anderson, G. de W.
CORPORATE SOURCE: Imp. Chem. Inds. Ltd., Manchester, UK
SOURCE: Sci. Phot., Proc. Intern. Colloq., Liege (1962), 1959,
487-511
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

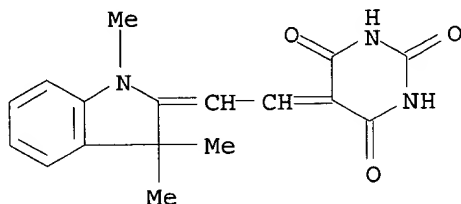
GI For diagram(s), see printed CA Issue.

AB The formation of polymeric forms (J aggregates contg. at least 150 mols.) of sensitizing dyes in Ag halide emulsions is studied. The positions of the absorption max. in MeOH and in the emulsion are given for a large no. of merocyanines. Symmetry of the terminal groups and, in general, redn. of the no. of possible stereoisomers, promotes the J aggregation. Electronic rather than structural symmetry is an essential, but not the sole requirement. Malononitrile dimethinemercyanines with 2 stereo forms show J-band aggregation. N,N'-Diethylthioharbituric acid dimethinemercyanines show aggregation only when a single isomer is possible. The no. of stereoisomers can be limited by enclosing the polymethine chain in a cyclic system. Even highly similar d and I forms increase this no. and prevent J-band sensitization. A new 4,7'-quinocyanine of structure I is described.

IT 93818-94-1, Barbituric acid, 5-[2-(1,3,3-trimethyl-2-indolinylidene)ethylidene]-
(photographic sensitization by, stereoisomerism and)

RN 93818-94-1 CAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)

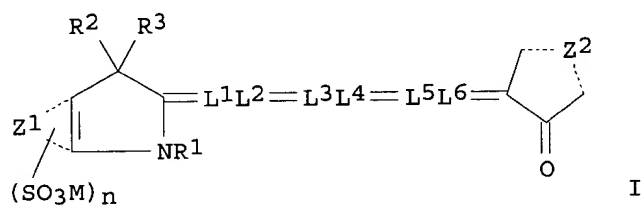


L11 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:693723 HCAPLUS
DOCUMENT NUMBER: 125:312364
TITLE: Silver halide photographic materials containing hexamethinemercyanine compounds
INVENTOR(S): Sakurada, Masami; Oono, Shigeru
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 33 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08211552	A2	19960820	JP 1995-15010	19950201

GI



AB The title materials comprise a hydrophilic colloid layer contg. .gtoreq.1 hexamethinemerocyanine compd. I [Z1 = nonmetal atoms required to form a benzo-condensed or naphtho-condensed ring; M = H, atoms or metal atom forming a monovalent cation; n = 1-3; R1-3 = (substituted) alkyl; L1-6 (substituted) methine group, the adjacent substituents may condensed to form a 5- or 6-membered ring; Z2 = atoms required to form a (substituted) heterocycle selected from pyrazolidinedion, isooxazolone, pyrazolopyridone, barbituric acid, pyridone, rhodanine]. The compds. are stable and water-sol. and provide photog. materials showing improved decoloring properties without adverse effects on the photog. properties.

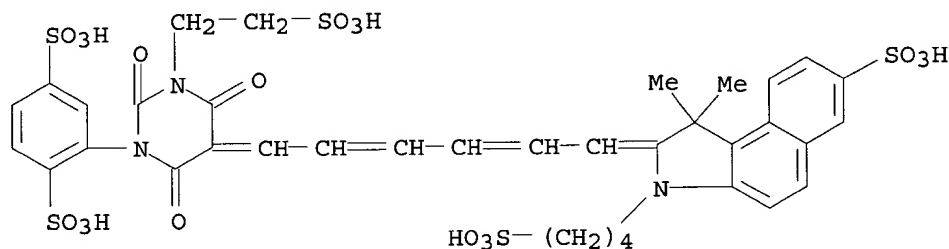
IT 183272-29-9

RL: DEV (Device component use); USES (Uses)

(Ag halide photog. materials contg. hexamethinemerocyanine compds.)

RN 183272-29-9 HCAPLUS

CN 1,4-Benzenedisulfonic acid, 2-[5-[6-[1,3-dihydro-1,1-dimethyl-7-sulfo-3-(4-sulfoethyl)-2H-benz[e]indol-2-ylidene]-2,4-hexadienylidene]tetrahydro-2,4,6-trioxo-3-(2-sulfoethyl)-1(2H)-pyrimidinyl]-, pentapotassium salt (9CI) (CA INDEX NAME)



● 5 K

L11 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:640204 HCAPLUS

DOCUMENT NUMBER: 125:278576

TITLE: Molecular hyperpolarizabilities of barbituric acid and cyclobutene-1,2-dione derivatives. Electronic and steric effects

AUTHOR(S): Cho, Bong Rae; Je, Jong Tae; Lee, Seung Jae; Lee, Sang Hae; Kim, Hyun Soo; Jeon, Seung Joon; Song, Ok-Keum; Wang, C. H.

CORPORATE SOURCE: Department of Chemistry, Korea University, Seoul, 136-701, S. Korea

SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1996), (10), 2141-2144
CODEN: JCPKBH; ISSN: 0300-9580

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of merocyanine dyes contg. various donors and barbituric acid and

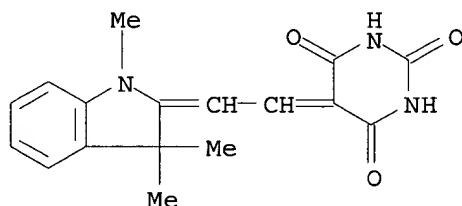
cyclobutene-1,2-dione moieties as the acceptors have been synthesized and their first-order hyperpolarizabilities .beta. were detd. The .beta. values of the barbituric acid derivs. increase as the strength of the donor is increased from 4-(dimethylamino)phenyl to trimethylindolinyl to benzothiazoliny, apparently due to the gradual decrease in the bond length alteration from a large pos. value to an optimum one by a stronger donor. In contrast, the .beta. values for the cyclobutene-1,2-dione derivs. decrease with the same variation of the donors even though the cyclobutene-1,2-dione is a poorer acceptor than the barbituric acid moiety. The results have been attributed to the electron-donating ability of the donors and the increased distortion of the chromophores from planarity.

IT 93818-94-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(hyperpolarizabilities of merocyanines from barbituric acid and cyclobutenediones)

RN 93818-94-1 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)



L11 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1963:426202 HCAPLUS

DOCUMENT NUMBER: 59:26202

ORIGINAL REFERENCE NO.: 59:4716e-g

TITLE: Stereochemical factors affecting optical sensitization

AUTHOR(S): Anderson, G. de W.

CORPORATE SOURCE: Imp. Chem. Inds. Ltd., Manchester, UK

SOURCE: Sci. Phot., Proc. Intern. Colloq., Liege (1962), 1959, 487-511

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB The formation of polymeric forms (J aggregates contg. at least 150 mols.) of sensitizing dyes in Ag halide emulsions is studied. The positions of the absorption max. in MeOH and in the emulsion are given for a large no. of merocyanines. Symmetry of the terminal groups and, in general, redn. of the no. of possible stereoisomers, promotes the J aggregation. Electronic rather than structural symmetry is an essential, but not the sole requirement. Malononitrile dimethinemerocyanines with 2 stereo forms show J-band aggregation. N,N'-Diethylthioharbituric acid dimethinemerocyanines show aggregation only when a single isomer is possible. The no. of stereoisomers can be limited by enclosing the polymethine chain in a cyclic system. Even highly similar d and I forms increase this no. and prevent J-band sensitization. A new 4,7'-quinocyanine of structure I is described.

IT 93818-94-1, Barbituric acid, 5-[2-(1,3,3-trimethyl-2-indolinylidene)ethylidene]-
(photographic sensitization by, stereoisomerism and)

RN 93818-94-1 HCAPLUS

CN 2,4,6(1H,3H,5H)-Pyrimidinetrione, 5-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]- (9CI) (CA INDEX NAME)

